

1. The NuPhone company is trying to get into the race for long distance business. They are offering a long distance plan which starts at \$5 monthly fee and is \$0.02 for every minute of long distance used.

- Write an equation of the line for the graph.
- Draw a graph of this relationship
- What is the slope of the graph? What does it represent?
- What is the y-intercept? What does it represent?
- If you paid \$8.00 for long distance, for how long did you talk?

2. Jimmy bought a satellite dish last year and enjoyed all of the new programming. He paid \$30 per month for programming fees and an initial cost of \$250.

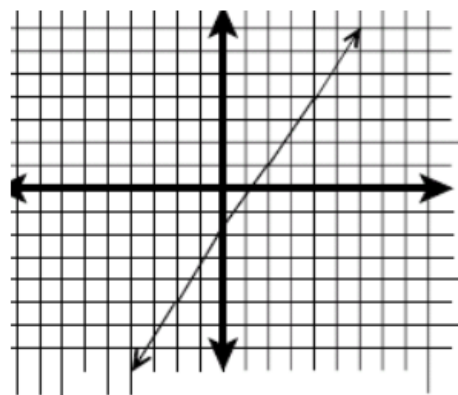
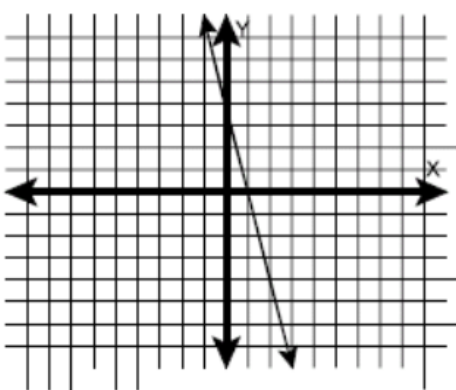
- Write an equation of the line for the graph?
- Draw a graph of this relationship
- What is the slope of the graph? What does it represent?
- What is the y-intercept? What does it represent?
- How much did he pay for the year?

3. Rearrange each of the following into standard form and state the slope, y-intercept, and x-intercept:

- |                       |                       |
|-----------------------|-----------------------|
| a) $4x + 3y - 10 = 0$ | b) $2x - 5y + 15 = 0$ |
| c) $6y - 12x = 18$    | d) $7y - 2x + 14 = 7$ |

4. Write the equation of the line in standard form for each of the following:

- |                       |                        |                       |            |
|-----------------------|------------------------|-----------------------|------------|
| a) slope = -3         | y - intercept = 2      | b) $m = 1/3$          | $b = -4.2$ |
| c) (2, 3) and (-1, 2) | d) (-4, -5) and (0, 6) | e) (8, 1) and (-2, 5) |            |
| f)                    | g)                     |                       |            |



5. Graph the following: (Remember to put the equation in standard form first)

- |                |                 |                 |                               |
|----------------|-----------------|-----------------|-------------------------------|
| a) $y = x + 2$ | b) $3 + y = 3x$ | c) $4y - 7 = x$ | d) $7 - \frac{1}{2}x + y = 0$ |
|----------------|-----------------|-----------------|-------------------------------|